What is claimed is:

1   1.   A method for allocating computer resources for use by a program, comprising the

2       steps of:

3           allocating a first resource; and

4           allocating a second resource having a shortest distance to the first resource;

5           wherein the distance between the resources is stored as firmware portable

6               to various operating systems running the program.

1   2.   The method of claim 1 where in the distance between the resources is selected

2       from a group consisting of:

3           a distance measured from one resource to another resource and

4           a distance measured relative to a distance used as a reference.

1   3.   The method of claim 2 wherein the distance between the resources is measured in

2       time units.

1   4.   The method of claim 1 wherein the distance between the resources is provided to

2       an operating system running the program upon power-up of a system running the

3       operating system.

1   5.   The method of claim 1 wherein the distance between the resources is measured by

2       the distance between nodes containing the resources.

1    6.    The method of claim 1 wherein the distance between the resources is provided by

2        the time taken to communicate from one resource to another resource or the time

3        taken to transfer data from one resource to another resource.

1    7.    The method of claim 1 wherein the resources reside in a plurality of nodes each of

2        which includes at least one resource being either an I/O device, a memory device,

3        or a processor.

1    8.    The method of claim 7 wherein resources in a node are on a same bus or share a

2        point-to-point link.

1    9.    The method of claim 1 wherein the first resource is an input device associated

2        with a storage device storing the program or storing data associated with the

3        program.

1    10.    The method of claim 1 further comprising the step of allocating a third resource

2        having a shortest distance to either the first resource or the second resource .

11. A system having computer resources for use by a program, comprising:

    means for allocating a first resource; and

    means for allocating a second resource having a shortest distance to the first resource;

    wherein the distance between the resources is stored as firmware portable to various operating systems running the program.

12. The system of claim 11 wherein the distance between the resources is selected from a group consisting of:

    a distance measured from one resource to another resource, and

    a distance measured relative to a distance used as a reference.

13. The system of claim 11 wherein the distance between the resources is measured by the distance between nodes containing the resources.

14. The system of claim 11 wherein the distance between the resources is measured in time units.

15. The system of claim 14 wherein the measured time units are provided by the time taken to communicate from one resource to another resource or the time taken to transfer data from one resource to another resource.

16. The system of claim 11 wherein the resources reside in a plurality of nodes each of which includes at least one resource being either an I/O device, a memory device, or a processor.

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| 1 | 17. | The system of claim 16 wherein resources in a node are on a same bus or share a |
| 2 | | point-to-point link. |

| 1 | 18 | The system of claim 11 further comprising means for providing the distance |
| 2 | | between the resources to an operating system upon power-up of the system. |

| 1 | 19. | The system of claim 11 further comprising means for allocating a third resource |
| 2 | | having a shortest distance to either the first resource or the second resource. |

| 1 | 20. | A computer-readable medium embodying instructions that perform a method for |
| 2 | | allocating computer resources for use by a program, the method comprising the |
| 3 | | steps of: |
| 4 | | allocating a first resource; and |
| 5 | | allocating a second resource having a shortest distance to the first resource; |
| 6 | | wherein the distance between the resources is stored as firmware portable |
| 7 | | to various operating systems running the program. |